

REMARKS

Following entry of the above amendment, claims 1, 3, 4, 9-15, 17, 19, 24-26, and 40 are amended, claims 32-9 are cancelled and claims 41-4 are added. Claims 1-31 and 40-44 are currently pending.

The amended claims address the informalities and § 112 concerns identified in the Office Action.

Applicant thanks the Examiner for the early indication of allowable subject matter in claims 13-16. Claims 13-16 are now rewritten in independent form as claims 41-44.

Claim 1 stood rejected as anticipated by Nelson '509 and Nelson '509 in view of JP 57-210820. The above amendment respectfully traverses this rejection.

Nelson '509 teaches molding a bicycle component using a soluble foam mandrel core, a sealed bladder, a composite, and a mold. The bladder is inflated through a bladder fitting to apply the necessary pressure to force the composite material against the mold's cavity walls. The mold is closed and heated to the temperature necessary to cure the composite material. After the composite material has cured, the mold is opened, the cured part is removed, and the bladder fitting extracted from the cured part. As a final step, the soluble core is dissolved in a solution and not reused.

There are several differences between what is taught in both Nelson '509 and claim 1. Amended claim 1 claims a "reusable body" as a component of the core. Nelson teaches a cores that is destroyed and not reused; indeed that is how the cores are removed from within the final product. In Nelson '509, the cores are soluble (Col. 4, lines 16-18, 31-34; Col. 5, lines 18-20), and are removed once the part is formed. Thus Nelson is different from claim 1 in that it does not claim a reusable core.

JP 57-210820 is also cited in combination with Nelson '509 against claim 1. First, the combination of references that teach usable and reusable cores is improper. The goal in Nelson is removing a bladder and a soluble removable core from within the formed part; the goal of JP 57-210820 is to reuse the core- not discard it. These two goals and teachings are inapposite, and the combination is improper. Second, the reference combination is improper because the differing arts of bicycle parts and the simple cylinders of JP 57-210820 do not suggest that the references should be combined. JP 57-210820 teaches formation of an extremely simple part. Nelson '509 teaches formation of a more complex part. The process and tool in JP 57-210820 is unsuitable to forming the complex parts of Nelson (and the current invention). Another reason the references do not suggest combination is that JP 57-210820 does not teach an outer mold, and in Nelson '509, such an outer

10x
11x
mold is necessary. Finally, JP 57-210820 does not disclose any of the steps of arranging an expandable core having a reusable inner body, applying a number of layers of structural fiber fabric incorporated in a plastic material matrix around the core, to form a layered outer body, of predetermined shape and thickness, arranging the core with the layered outer body in the cavity of a mould, or increasing the temperature of the mould to a value sufficient to cause the reticulation of the plastic material matrix.

Finally, with respect to claim 9, a dependent claim, it stands rejected in view of Nelson '509 in view of Castanie. In Castanie, the cores disintegrate and/or are removed by "scraping, blowing, or washing." Col. 7, lines 35-49. Since both the cores in Nelson '509 and Castanie are not reusable, nor do they contain a reusable body within the core, they are distinguishable from Claim 9. Further, the combination of these references is improper. Castanie has a clear teaching away from Nelson '509. Castanie dismisses the process of Nelson (cores "dissolved by water or a solvent") as "unsuitable in the present case to produce accurate internal surfaces." Col. 2, lines 32-44). Thus, there is not only no suggestion to combine the references, there is almost an ultimatum not to combine the references. In addition, Nelson '509 is directed to cores for bicycles, while Castanie only discusses solid cores directed to "articles." Thus the fields of the invention are different; where Nelson '509 teaches

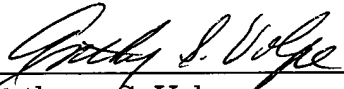
Applicant: Mario Meggiolan
Application No.: 10/073,407

forming bicycle parts, Castanie does not teach the formation of anything so specific.

In view of the foregoing, Applicant respectfully requests withdrawal of the restriction requirement and examination of all of the pending claims. If for any reason the Examiner believes that an interview, either telephonically or in person, would advance prosecution of the application, the Examiner is respectfully requested to contact the undersigned to arrange an interview.

Respectfully submitted,

Mario Meggiolan

By 
Anthony S. Volpe
Registration No. 28,377
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

ASV/SBS/tab
Enclosures